

**REMARKS**

Claims 18-33 are pending in the present application, and claims 29, 31 and 33 have been amended. For at least the reasons stated below, Applicant submits that the claims are patentable in view of the prior art of record.

**I.      Objection to Claims**

In the Present Office Action, the Examiner objects to claims 31 based on an informality. Claim 31 has been amended to properly recite its dependence from claim 21, thereby obviating the present objection.

**II.     Rejection of Claims under 35 U.S.C. §112, ¶ 2**

Claims 29 and 33 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In order to advance the prosecution of the present matter, claims 29 and 33 have been amended accordingly. These amendments do not add any new matter. For example, claim 29 is supported by, among other sections, page 12, lines 20-29 of the Substitute Specification. In addition, claim 33 is supported by, among other sections, page 7, lines 18-21 of the Substitute Specification.

**III.    Rejection of Claims under 35 U.S.C. §103(a)**

**A.      Rejection of claims 18-29, 31 and 33 in view of U.S. Patent No. 5,329,531**

Claims 18-29, 31 and 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 5,329,531 issued to (“Diepstraten”). Applicant submits that currently pending claims 18-29, 31 and 33 are patentable over Diepstraten.

For a claim to be rejected for obviousness under 35 U.S.C. § 103(a), the prior art must disclose or suggest each feature of the claim, and it must also suggest combining the features in the manner contemplated by the claim. *See Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934 (Fed. Cir. 1990), *cert. denied*, 111 S. Ct. 296 ; *In re Bond*, 910 F.2d 831, 834 (Fed. Cir. 1990).

Claims 18 and 19 provide for a frame structure for transmitting digital data. Based on collision problems occurring between central units attempting to transmit data, claim 18 provides, *inter alia*, “when there is a collision with a second one of the central units, the

second one of the central units using a same time slot and a same frequency channel for a transmission frame as the first central unit, at least one of the first one of the central units and the second one of the central units: i) immediately refraining from occupying the time slot, and ii) attempting occupation again after a time lag.” Similarly, to overcome collision problems, claim 19 provides, *inter alia*, “withdrawing by the first one of the central units and attempting occupation again after a lag time.”

Diepstraten teaches accessing a communication medium. Diepstraten discloses, among other things, the exact problem that the present invention seeks to overcome, *i.e.*, problems associated with collisions between multiple stations (*e.g.*, elements 18, 20, 22 and 24). The Examiner-cited passage of col. 4, lines 47-67 explicitly illustrates the existing issue of the station 18 realizing that the medium is busy. Diepstraten solves this problem by incorporating a time delay before attempting to determine if the medium is available or again busy. Through the inclusion of a random delay, Diepstraten “significantly” reduces any likelihood of collision. (Col. 4, line 60).

In the first full paragraph of Page 4 of the present Office Action, the Examiner states, and Applicant agrees, that “Diepstraten does not expressly disclose when there is a collision with a second one of the central units, the second one of the central units using a same time slot and same frequency channel for a transmission frame as the first central unit.” However, Applicant respectfully disagrees with the Examiner’s assertion that Diepstraten’s teaching of a backbone network 30 between base stations 14 and 16 renders the claimed invention obvious.

Applicant submits that the Examiner has engaged in improper hindsight reconstruction because Diepstraten fails to teach or suggest an invention that one of ordinary skill in the art would be motivated to modify to achieve the claimed invention of claims 18 and/or 19. Diepstraten’s limited discussion of transmission collisions relates to time delayed transmission by the stations 18 and 20 relative to the base station 14. The Examiner-cited passage of Diepstraten containing this limited discussion of potential collisions does not suggest any further problems to be considered or solved, because Diepstraten’s disclosure obviates the concern of potential collisions through an initial detection of the availability of the transmission medium by the station 18 or 20. Based on the above-noted limited discussion, the Examiner has improperly suggested a data collision concern through the backbone network 30. Diepstraten is actually completely silent about data transmission

concerns on the backbone network, and Diepstraten is similarly silent about any motivation for improving the backbone network in a manner that would render the claimed invention obvious.

While the Examiner asserts that the motivation to modify the teaching of Diepstraten is Diepstraten's usage of the CSMA/CA system for communicating over the wireless channel, Applicant respectfully disagrees with the Examiner's application of this alleged motivation to the backbone network. Applicant submits that this asserted motivation is improper because Diepstraten already employs techniques for "significantly" reducing data collisions. Even assuming that the Examiner's asserted motivation may be supported, it would not be obvious to modify the Diepstraten system to arrive at the present invention because Diepstraten may simply re-employ its existing disclosed techniques for reducing data collision in the wireless transmission, specifically the inclusion of a random delay.

Applicant respectfully disagrees with the Examiner's unsupported assumption that the backbone network 30 would even utilize the CSMA/CA access protocol. Diepstraten discloses the base stations 14 and 16 communicating across the backbone network 30, which is illustrated as a physical wired connection. It is unlikely that the base stations would follow the CSMA/CA access protocol across the backbone network because of, among other things, the collision detectability of a physical network, which is not readily found in wireless networks. Therefore, if the backbone network uses any other access protocol besides CSMA/CA, there would be no motivation to modify the teachings of Diepstraten since there would not be any concern over data collisions on the wired, high bandwidth backbone network 30.

Therefore, Applicant respectfully submits that there is no proper motivation to modify the teachings of Diepstraten which would render the claimed invention of claims 18 and 19 as obvious. In addition, the Examiner's stated motivation is improper because Diepstraten already discloses an acceptable technique for "significantly" reducing collisions, and there is no support for the Examiner to assume that Diepstraten would utilize the CSMA/CA access protocol in the wired backbone network 30.

For at least these reasons, claims 18 and 19 are patentable over Diepstraten., Claims 20-29, 31 and 33 depend from claims 18 and 19, respectively, and recite further patentable subject matter over Diepstraten.

B. Rejection of Claim 30

Claim 30 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Diepstraten in view U.S. Patent No. 5,461,627 issued to (“Rypinski”). Claim 30 depends from claim 18 and recites further patentable subject matter over Diepstraten. In addition, Rypinski has not been asserted to overcome, and does not overcome, the above-noted deficiencies of Diepstraten as applied against parent claim 18, therefore dependent claim 30 is allowable over Diepstraten and Rypinski for at least the same reasons as stated above with respect to claim 18.

IV. Objection to Claim 32

Applicant thanks the Examiner's acknowledgment of claim 32 as containing patentable subject matter. As stated above, Applicant respectfully submits that claim 18, upon which claim 32 ultimately depends, is in allowable condition. Therefore, withdrawal of the objection to claim 32 as being dependent upon a rejected base claim is respectfully requested.

**Conclusion**

In light of the foregoing, Applicant respectfully submits that all of the pending claims 18-33 are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore respectfully requested.

The Office is authorized to charge the **three-month extension fee of \$1,020** to Kenyon & Kenyon's Deposit Account No. **11-0600**.

Respectfully submitted,  
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 (R. No. 36,197)

Dated: December 5, 2005

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